



DUBAI PHARMACY COLLEGE FOR GIRLS

newsletter

May 2024



“May your actions inspire others to dream more, learn more, do more, and become more.”

John Quincy Adams



dubaipharmacycollege



DPCGNewsletter@dpc.edu



Late
HAJ SAEED BIN AHMED
AL LOOTAH
Founder
(1923 - 2020)



“People die,
but memories
last forever”



contents



What has DPC been upto in the month of the May



1. MAY BULLETIN

2. STUDENT'S CORNER







DUBAI PHARMACY COLLEGE AT AL SHOLA PRIVATE SCHOOL GRADUATION CEREMONY

Dr. Bazigha represents Dubai Pharmacy College at Al Shola Private School Graduation Ceremony for the Academic Year 2023–2024 as a guest of honor. The event took place on Friday, May 31, 2024.

On this special occasion, we would like to extend our heartfelt congratulations to the students and families of Al Shola Private School for this remarkable achievement. The completion of this academic stage marks the end of one journey and the beginning of another towards a bright and promising future.

We take this opportunity to express our pride and admiration for the students' success and excellence. We wish them continued progress and success in their academic and professional endeavors. We look forward to witnessing more of their brilliant achievements in the future and wish them all the best in achieving their dreams and aspirations.



FIRST SUCCESSFUL EXPERIENCE IN CONDUCTING PHARMACOTHERAPEUTICS PRACTICAL SESSION (PBL) IN SIMULATION CENTER



On 6th May 2024, the first practical session in pharmacotherapeutics was conducted using a problem-based learning (PBL) approach in the Simulation Center, DMU by the Pharmacy Practice Department (guidance and instruction by head of the department, Prof. Kishore) to enhance the practical skills and clinical decision-making abilities of pharmacy students.

Held for the 3rd year students (Batch 30) of DPC, the session instructors included **Dr. Eiman Shamseldin** and **Dr. Doaa Kamal**. The simulation team consisting of **Ms. Rosita Pangilinan** and **Mr. Michael Francisco** as well as the teaching assistants **Ms. Farah Nagy** and **Ms. Alya Osman**, played a crucial role in the smooth conducting of the session.





MINOR AILMENTS PRESCRIBING SEMINAR

On Wednesday May 29, 2024, **Dr. Heba Bani Hani** gave a presentation to students and faculty from Dubai Pharmacy College on a timely topic: Minor Ailments Prescribing.

The seminar aligned with DPC's goals of enhancing pharmacy practice and exposing our students to innovative roles of pharmacists by showcasing the expanding scope of pharmacists as prescribers.

Dr. Bani Hani's talk highlighted the innovative role of pharmacists as prescribers. Her interactive session included case studies where DPC students were highly engaged in assessing patients with minor ailments and determining the appropriate treatment (prescription) for each case. Dr. Bani Hani advocated for the expanded roles of pharmacists, asserting that they are not merely "pill counters or label slappers," and stressed the importance of continuous education to ensure the best patient health outcomes.



DUBAI PHARMACY COLLEGE TAKES ITS INDUSTRIAL TRAINING AT JULPHAR PHARMACEUTICALS TO A HANDS-ON LEVEL



Dubai Pharmacy College is pleased to announce the enhancement of Industrial Training for BPharm students at **Julphar Pharmaceuticals, RAK, UAE**.

The program will commence on **July 1st, 2024**, and will be conducted under the guidance of our faculty members and training preceptors at Julphar.

The training sessions are designed to provide students with a comprehensive understanding of the pharmaceutical industry and its practices.

The implementation plan for this new training opportunity was discussed and approved in a meeting between the DPCG Training Faculty and the JTC Staff. The meeting was headed by **Prof. Bazigha Abdulrasool**, Head of Pharmaceutical Sciences, and **Dr. Rasha**, along with their training teams.

We sincerely thank **Dr. Rasha** and her dedicated team, **Mr. Omar Faruq**, and **Mr. Zohaib Parvez**, for their unwavering support in ensuring a successful and efficient training experience for DPCG students.



This hands-on experience serves to enhance the competencies required for employability and career advancement.



BOOK PUBLICATION BY DPC FACULTY



Prof. Mirza R. Baig has published a book as one of the editors for **Concepts in Pharmaceutical Biotechnology and Drug Development** (Interdisciplinary Biotechnological Advances) released on 21 May 2024. This book provides comprehensive coverage of the development of new pharmaceuticals and the enhancement of existing ones.

While introducing the roles and applications of biotechnology in drug design and development, the book describes how developments in other fields, like genomics, proteomics, and high-throughput screening, have facilitated the discovery of novel therapeutic targets and drug development methods. It included concepts that are essential to biotechnology and apply to protein therapies.

He also contributed to a chapter on **Biotechnological Approaches in Infectious Diseases**. This chapter gives a comprehensive overview of the present impacts of infectious illnesses, focusing on the primary factors that lead to illness and death. Furthermore, it highlights the potential of nanotechnology to improve the existing therapeutic approaches.

Congratulations!

To Prof. Mirza on this remarkable achievement. We couldn't be more proud to have you as our faculty member!



RESEARCH PUBLICATION

Congratulations!

To **Dr. Hanan Anbar**, Associate Professor at the Department of Pharmaceutical Sciences, on the publication of her two new articles:

1 "Design and discovery of urease and *Helicobacter pylori* inhibitors based on benzofuran/benzothiophene-sulfonate and sulfamate scaffolds for the treatment of ureolytic bacterial infections", in which, she's the corresponding author, published in the International Journal of Biological Macromolecules, a Q1 SCOPUS-indexed journal, impact factor 8.2 (top 10% in molecular biology).

2 "Design, synthesis, biological evaluation, and in silico studies of novel pyridopyridine derivatives as anticancer candidates targeting FMS kinase", as an author, published in the European Journal of Medicinal Chemistry, a Q1 SCOPUS-indexed journal, impact factor 6.7 (top 8% in Pharmacology).

International Journal of Biological Macromolecules 271 (2024) 132502

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ELSEVIER

Biological Macromolecules

Check for updates

Design and discovery of urease and *Helicobacter pylori* inhibitors based on benzofuran/benzothiophene-sulfonate and sulfamate scaffolds for the treatment of ureolytic bacterial infections

Omar Hashem^a, Sumera Zaib^{b,c,*}, Seyed-Omar Zareai^a, Hira Javed^b, Reena A. Kedia^a, Hanan S. Anbar^{c,*}, Imtiaz Khan^d, Anil Ravi^e, Mohammed I. El-Gamal^{b,c,f,g}, Ghalia Khoder^{b,h}

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ARTICLE INFO

Keywords:
Helicobacter pylori
Urease
Gut microflora

ABSTRACT

A series of sulfonate and sulfamate derivatives bearing benzofuran or benzothiophene scaffold exhibited potent inhibitory effect on urease enzyme. Most of the derivatives exhibited significantly higher potency than thiourea, the standard inhibitor. Compound **1s** was identified as the most potent urease inhibitor with an IC₅₀ value of 0.42 ± 0.08 μM, which is 53-fold more potent than thiourea, positive control (IC₅₀ = 22.3 ± 0.031 μM). The docking results further revealed the binding interactions towards the urease active site. Phenotypic screening revealed that compounds **1c**, **1d**, **1e**, **1f**, **1j**, **1n**, and **1t** exhibit high potency against *H. pylori* with MIC values ranging from 0.00625 to 0.05 mM and IC₅₀ values ranging from 0.0031 to 0.0095 mM, much more potent than the positive control, acetylsalicylic acid (MIC and IC₅₀ values were 12.5 and 7.38 mM, respectively). Additional studies were performed to investigate the toxicity of these compounds against the gastric epithelial cell line (AGS) and their selectivity profile against *E. coli*, and five *Lactobacillus* species representative of the gut microflora. Permeability characteristics of the most promising derivatives were investigated in Caco-2 cell line. The results indicate that the compounds could be targeted in the GIT only without systemic side effects.



RESEARCH PUBLICATION

Congratulations!

To **Ms. Lin Mosbah Katramiz**, DPC MPharm Graduate, and **Dr. Doaa Kamal AlKhalidi** from the Pharmacy Practice Department, on the publication of their research article titled “**Physicians’ Perceptions Regarding the Role of Vitamin D in COVID-19 Management: A Qualitative Study**” in the Research Journal of Pharmacy and Technology, a Scopus-indexed journal, Q2.

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RESEARCH ARTICLE

Physicians’ Perceptions regarding the Role of Vitamin D in COVID-19 Management: A Qualitative Study

Lin Mosbah Katramiz¹, Doaa Kamal Alkhalidi^{1*}, Muneeb Ahsan², Dujana Mostafa Hamed³

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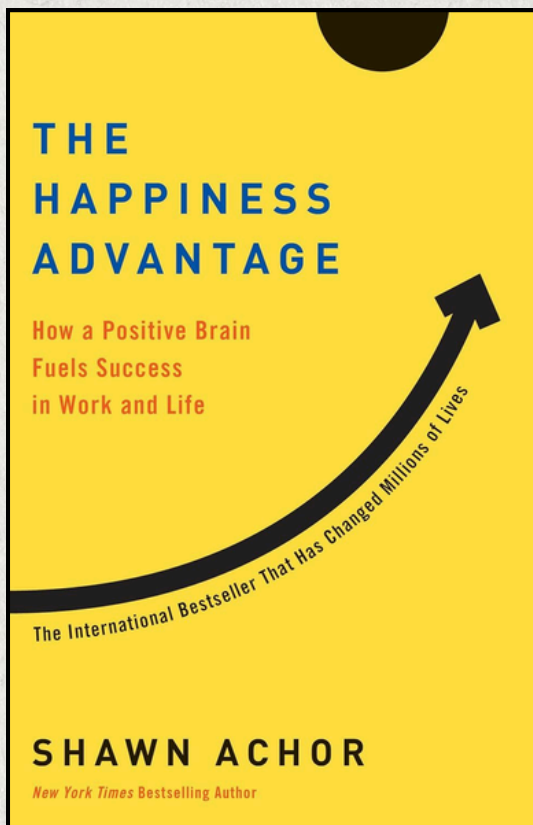
ABSTRACT:

Purpose: COVID-19 outbreak has created a public health crisis starting from December 2019. Vitamin D has raised as a protective factor that can take part in reducing risk of infection. It has an immunomodulatory wide spectrum action. This study aims to ascertain the physicians’ perceptions regarding Vitamin D role as adjuvant therapy in COVID-19 infection. **Methods:** A descriptive qualitative design was approached. Data collection took place in a governmental tertiary hospital in Dubai, United Arab Emirates. A semi-structured interview guide was developed and validated for this purpose. In-depth individual interviews with physicians (n=20) from different departments were conducted. The participants were enrolled until reaching the saturation level. The interviews were recorded and transcribed. A thematic content analysis was performed. **Results:** After analysis, three elemental themes with subthemes emerged that described physicians’ experience and perceptions: general protocol followed for prescribing Vitamin D in COVID-19 patients, Clinical effect of Vitamin D in COVID-19 disease, Vitamin D deficiency and COVID-19 mortality. Different responses were obtained from physicians reflecting their experience with COVID-19 patients. **Conclusion:** The findings revealed physicians’ experience of Vitamin D clinical effect in COVID-19. Physicians stated the different regimen of Vitamin D used in COVID-19 patients and declared the association of Vitamin D in different COVID-19 cases but, no relation of Vitamin D deficiency and COVID-19 mortality as per physicians’ experience.

GOOD READS SELECTION: "THE TRANSFORMATIVE POWER OF POSITIVITY IN THE HAPPINESS ADVANTAGE"

*Book Review by Mrs. Sabeena Salam,
Director, Institutional Effectiveness Unit,*

"The Happiness Advantage: How a Positive Brain Fuels Success in Work and Life" by Shawn Achor is a compelling and well-researched exploration of the impact of positive psychology on personal and professional success. Achor, a Harvard-trained researcher, deftly blends scientific findings with practical advice, making the book both informative and actionable.



The core premise of "**The Happiness Advantage**" is that happiness fuels success, not the other way around. Achor challenges the conventional notion that success leads to happiness, arguing instead, that a positive mindset can significantly enhance productivity, creativity, and performance. He supports this thesis with a robust array of studies and real-life examples, demonstrating how happiness can improve every aspect of our lives, from our careers to our relationships.

One of the strengths of the book is Achor's ability to distill complex psychological concepts into engaging and relatable anecdotes.

His writing is accessible, and he uses humor and storytelling to keep the reader engaged. Each chapter introduces a principle of positive psychology, such as the Tetris Effect or the 20-Second Rule, and offers practical steps to implement these principles in daily life.

For instance, Achor discusses the importance of cultivating a "positive Tetris Effect," where we train our brains to look for patterns of possibility and opportunity rather than failure and negativity.

This mental shift, he argues, can have profound effects on our overall well-being and success. Similarly, the 20-Second Rule suggests making desired habits easier to start by reducing the activation energy required, while making undesirable habits harder to initiate.

Achor's book is not just theoretical; it's filled with actionable advice. He provides specific exercises and strategies, such as gratitude practices, meditation, and conscious acts of kindness, which are designed to help readers rewire their brains for positivity. These practices are backed by scientific evidence and have been shown to lead to lasting improvements in happiness and success.

Critics might argue that the book's optimism could come across as overly simplistic or idealistic, particularly for those facing significant life challenges. However, Achor acknowledges that while positivity alone cannot solve all problems, it can equip individuals with the resilience and mindset needed to tackle adversity more effectively.

Overall, "***The Happiness Advantage***" is a valuable read for anyone looking to enhance their personal and professional lives. Shawn Achor's blend of scientific rigor, practical advice, and engaging storytelling makes a compelling case for the power of positivity. The book is a testament to the idea that by prioritizing happiness, we can achieve greater success and fulfillment in all areas of our lives.

Thank you Mrs. Sabeena for this wonderful and enlightening book review!

We could do more to add some positive psychology in our life.

We look forward to more of these delightful reviews!



TRAINING DEVELOPMENT CAMP ORGANIZED BY GPSA UNDER THE INTERNATIONAL PHARMACEUTICAL STUDENTS' FEDERATION (IPSF)

This year, one of our distinguished students could participate in the Training Development Camp organized by GPSA under the International Pharmaceutical Students' Federation (IPSF). This camp, a hallmark event in the realm of pharmaceutical education and professional development, aims to enhance the practical skills and theoretical knowledge of future pharmacists through intensive training sessions, workshops, and interactive activities.

Foster leadership abilities through role-playing, problem-solving tasks, and team-building exercises. The insights and skills gained from the Training Development Camp have equipped our students with a solid foundation to excel in their academic and professional endeavors. Additionally, as a now certified trainer, this student will share their experience with our students through workshops, further enriching our academic community.

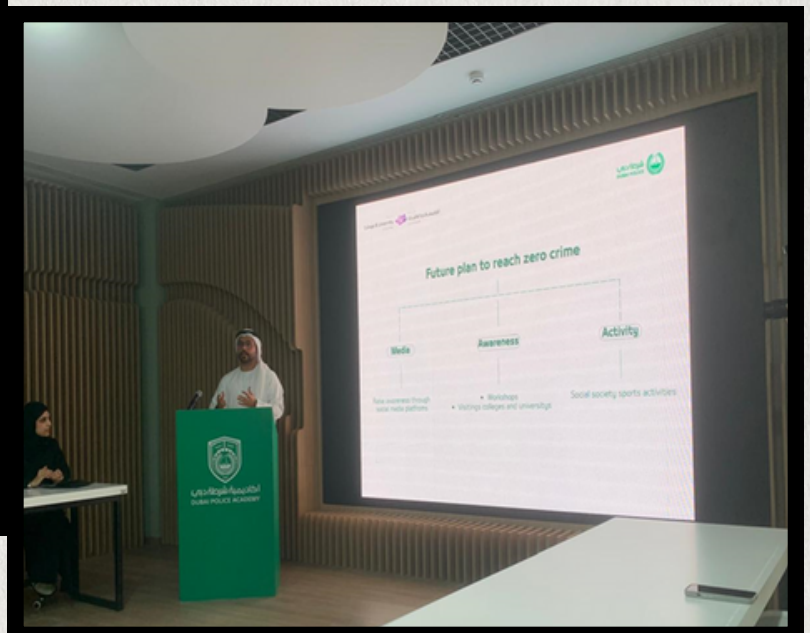


DUBAI PHARMACY COLLEGE LEADS THE WAY IN CAMPUS SAFETY AT THE 2ND ZERO CRIME GATHERING

Dubai Pharmacy College Leads the Way in Campus Safety at the 2nd Zero Crime Gathering. The 2nd Zero Crime Gathering, organized by The Council of Universities and Colleges of Dubai Police, is a pivotal event aimed at fostering collaborative efforts between academic institutions and Dubai Police to create a safer community.

Purpose:

- Enhancing campus safety
- Encouraging community participation
- Promoting education and awareness



QURAN COMPETITION

A celebration was organized to honor all participants and teachers of Quran Competition. The ceremony began with a recitation of verses from the Quran.

Speeches were delivered by participants, who emphasized the importance of Quranic studies in personal and academic life.

Certificates of participation were awarded to all contestants, and special awards were given to the top performers

Encourage students to engage deeply with the Quran, enhancing their recitation skills and understanding of its teachings.

Provide a platform for students to showcase their devotion to the Quran.



IPPE 01 ORIENTATION FOR 2ND YEAR PHARMACY STUDENTS

On 31 May 2024, DCPG recently conducted an orientation for 2nd-year pharmacy students preparing for their IPPE 01 community pharmacy training. The highlight of the session was the presentation delivered by Dr. Bana, representing the Aster Pharmacy Group.

Dr. Bana also provided practical tips and guidance on how students can make the most of their IPPE 01 training at Aster Pharmacy locations. She taught the need for professionalism, effective communication skills, and a proactive approach to learning. Students were encouraged to utilize observation time wisely, ask thoughtful questions, and actively participate in daily pharmacy activities.

The event featured insightful advice from experienced senior students. The senior student speakers - Juman, Marwa, and Rahma* - shared their firsthand experiences and tips to help the new batch of students make the most of their upcoming community pharmacy training. They covered practical matters like professional dress codes, communication with pharmacists and patients, and making the best use of observation time.

Events like this, which combine peer mentorship and expert guidance, are instrumental in helping pharmacy students transition smoothly into training.

The highlight of the session was the interactive group discussions facilitated by the DCPG coordinator and Students.

Dr. Ammar led interactive group discussions to clarify any outstanding questions about the IPPE 01 program and requirements. This allowed the 2nd year students to get a comprehensive understanding of what to expect and how to prepare.



DPCG SENDS STUDENTS FOR IPPE02 TRAINING AT DUBAI HEALTH HOSPITALS

We're thrilled to announce that DPCG is collaborating with Dubai Health Hospitals, including Dubai, Latifa, Rashid, and Al Jalela hospitals, to provide IPPE02 training to our dedicated students.

Today, we successfully conducted an informative orientation session for our third-year students. The session was honored by the presence of esteemed professionals, Dr. Asma from Aljalela Hospital and Dr. Ahoud from Latifa Hospital, who graciously shared their expertise as the heads of pharmacy.

This IPPE02 training opportunity will empower our students to gain valuable practical experience and enhance their skills in a real healthcare setting. We believe this training will be important in shaping their future careers and prepare them for APPE clinical training.



DUBAI PHARMACY COLLEGE FOR GIRLS SHINE IN THE ANNUAL RESEARCH DAY



On May 29th, 2024, Dubai Pharmacy College for Girls organized a very successful Research Day. **Prof. Sherief Khalifa**, Dean of the College, welcomed **Prof. Thani Al Mheiri**, The Chancellor, The Provost, Deans of Medical College and College of Nursing, the esteemed guests, the faculty members, and students. After that, The Dean gave the floor to our talented 4th year undergraduate students to showcase their research projects, demonstrate incredible dedication, inspiration, and passion for research.

The event was a wonderful opportunity for our students to present their research and receive valuable feedback from faculty members and peers. A heartfelt thank you to all the organizers, faculty, and attendees for making this event a memorable one.

Students' contributions are shaping the future of our field, and we couldn't be prouder.



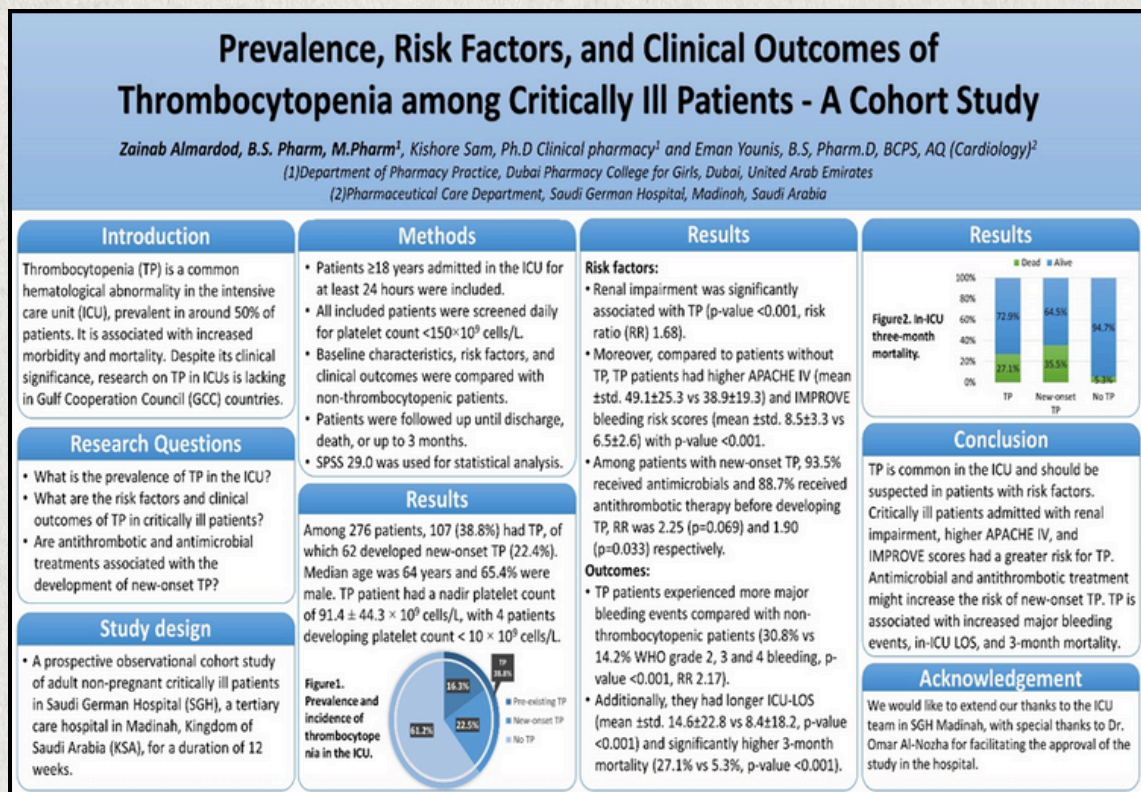
RESEARCH PRESENTATION BY DPC STUDENTS AT 2024 ACCP VIRTUAL POSTER SYMPOSIUM

≡ Congratulations! ≡

To all the following DPC students and their mentors for their remarkable participation by presenting their research works at the prestigious **2024 ACCP Virtual Poster Symposium**, which is recognized globally as a leading international Pharmacy association from the USA!

To **Zainab Abdullah Al Mardad**, M.Pharm student, supervised by **Dr. Kishore Sam** and **Dr. Eman Younis** for her outstanding achievement in presenting her research on:

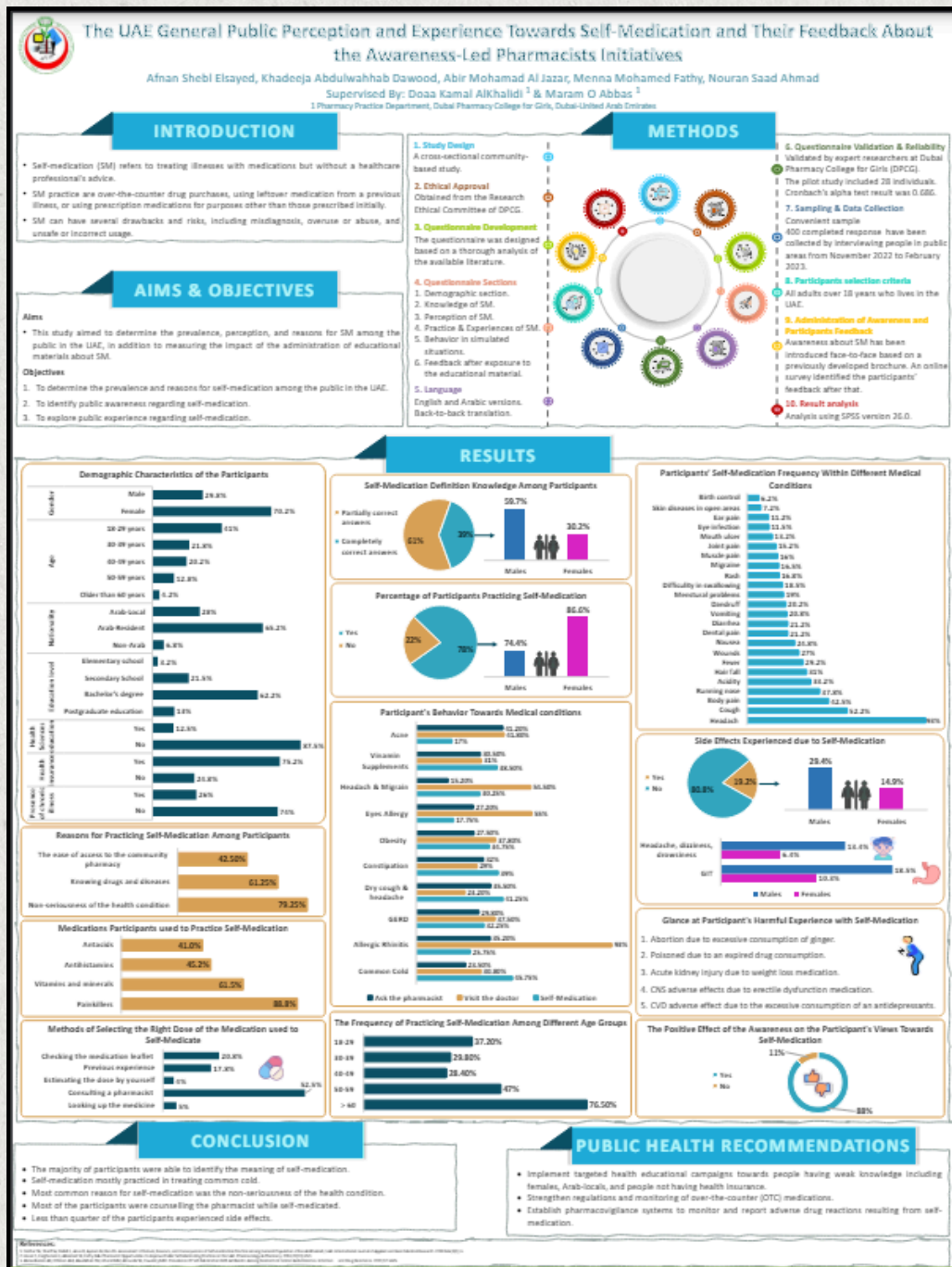
"Prevalence, Risk Factors, and Clinical Outcomes of Thrombocytopenia among Critically Ill Patients - A Cohort Study"



≡ Congratulations! ≡

To Afnan Elsayed, Abir Al Jazar, Khadeeja Dawood, Menna Fathy, Nouran Saad, BPharm Students, who were supervised by: Dr. Doaa Kamal Alkhalidi and Dr. Maram Abbas, for presenting on their poster titled:

"The UAE General Public Perception and Experience Towards Self-Medication and Their Feedback About the Awareness-Led Pharmacists Initiatives"



≡ Congratulations! ≡

To **Rula Aljaede**, MPharm Student, supervised by: **Ammar Jaber**, **Semira Beshir**, **Ramadan Elkalmi**, **Dujana Hamed**, **Amany Hamed**, **Zulfa AlDeesi**, and **Jainambo Meera**, for presenting on the research titled:

"Prevalence, Characteristics, and Outcomes of Carbapenemase-Producing Organisms in Selected Healthcare Facilities in the UAE - A Retrospective Study"

كلية دبي للصحة
Dubai Pharmacy College for Girls

Prevalence, characteristics, and outcomes of carbapenemase-producing organisms in selected healthcare facilities in the United Arab Emirates: a retrospective study

Rula Aljaede¹, Ammar Jaber¹, Semira Beshir¹, Ramadan Elkalmi², Dujana Hamed³, Amani Hamed⁴, Zulfa Aldeesi⁵, Jainambo Meera⁶

¹Department of Pharmacy Practice, Dubai Pharmacy College for Girls, Dubai, UAE, ²Department of Clinical Pharmacology, Sebha University, Libya, ³Department of Infectious Diseases, Rashid Hospital, Dubai, UAE, ⁴Thumbay Labs, Ajman, UAE, ⁵Microbiology and Infection Control Unit, Latifa Hospital, Dubai, UAE, ⁶Microbiology Laboratory, Rashid Hospital, Dubai, UAE

accp Virtual Poster Symposium

INTRODUCTION

Carbapenems are commonly used antibiotics to treat nosocomial infections[1]. However, their overuse and misuse have led to the development of resistance, particularly carbapenemase-mediated[2], which can escalate to multidrug resistance (MDR) with high mortality rates up to 67%[3,4].

Carbapenemase producers (CP) pose significant healthcare challenges globally and in the United Arab Emirates (UAE), due to limited antibiotic options and growing prevalence[5]. The World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC) categorize them as high-priority urgent threats[6].

There are limited studies that assessed the prevalence of CP and their impact in the UAE, highlighting the importance of obtaining updated insights.

RESEARCH QUESTION

What is the prevalence, characteristics, and impact of various CP in the UAE?

STUDY DESIGN

Retrospective quantitative, isolate-based study, between Jan 2018 and Jun 2021.

1.2% Total of 65 public and private healthcare facilities in Dubai and the Northern Emirates including academic institutes (11 hospitals, 49 medical centres, and 5 rehabilitation & homecare centres).

Ethical Approvals Ref#: REC/PG/2021/15, IRB/EXTERNAL/66/Sep-2021, & DSREC-SR-08/2021_03

METHODS

1 Microbiological records were reviewed to identify all Gram-negative bacteria from any clinical specimen (N= 77228).

Selection: n=8397 (10.8%)

High priority threats with acquired carbapenem resistance (CR) defined by CDC & The Clinical and Laboratory Standards Institute (CLSI).

Inclusion: n=5510

Clinically significant MDR strains of Enterobacteriales, Acinobacter, and Pseudomonas aeruginosa following the modified (Magiorakkos et al., 2012) criteria.

Deduplication: n=3629

In accordance with WHO Global Antimicrobial Resistance and Use Surveillance System (GLASS) guidelines; the first isolate per patient, per pathogen, per specimen, per year, per infection origin was considered.

Screening: n=1201 CP (684 patients)

Only 2075 isolates underwent screening through various phenotypic tests (Modified Carbapenem Inactivation Method, Modified Hodge, Phoenix automated Machine) or by GeneXpert PCR for gene identification.

2 Medical records were reviewed for associated characteristics, 30-day mortality and microbiologic response as per The Infectious Diseases Society of America (IDSA) definition.

DATA ANALYSIS

Prevalence of CP among CR isolates were calculated. Descriptive analysis and Chi-square test were used in data analysis using SPSS software V29.

PREVALENCE

Figure 2. Prevalence of CP by year (%)

CHARACTERISTICS

OUTCOMES

CONCLUSION

The study shows a high prevalence of CP harboring NDM and OXA-48 genes among CR strains in the UAE, signaling outbreaks during COVID-19 pandemic. This underscores the challenges in providing effective antimicrobial treatments with favorable outcomes, warranting further research on associated risk factors and treatment impacts.

RESULTS

PREVALENCE OF CP BY PATHOGEN

Figure 3. Prevalence of CP by pathogen (%)

PREVALENCE OF CP BY CLINICAL SPECIMEN

Figure 4. Prevalence of CP by clinical specimen

CR Acinetobacter outbreak during mid-2021

Figure 5. CR Acinetobacter outbreak during mid-2021

ASSOCIATION BETWEEN CP GENE AND RESISTANCE PATTERN

CP gene (n=8397)	MDR	MDR/Possible XDR	Possible XDR	Possible XDR/PDR	Possible PDR	OTR
NDM (292)	11	29.6	39.5	15.8	4.1	98.2
OXA-48 (422)	17.3	17.3	37.9	26.3	1.2	48.8
VM (7)	-	-	28.6	42.9	28.6	100
IMP (3)	66.7	-	33.3	-	-	33.3
NDM/OXA-48 (113)	10.9	16.8	38.9	41.6	1.8	83.8
NDM/IMP (1)	-	-	100	-	-	100

Table 2. Association between CP gene and Resistance pattern

OUTCOMES OF ISOLATED CP AS PER PHENOTYPE RESISTANCE CLASSES

Phenotype Resistance Classification (%)	Microbiological Outcome (%)				Clinical Outcome (%)		
	Eradication	Persistence/Relapse	Colonization	Indeterminate	Survived	Non-survived	Indeterminate
MDR	62.4	10.1	4.5	7.3	15.7	74.7	12.4
MDR/Possible XDR	63	20.4	2.2	1.7	12.6	67.4	22.2
Possible XDR	53.9	24	5.6	4.3	12.2	65.7	27.5
Possible XDR/PDR	48.3	26.7	5.1	3	18.9	64.4	30.9
Possible PDR	41.5	26.8	7.3	12.2	12.2	61	34.1

Table 3. Outcomes of isolated CP as per phenotype resistance classes

RECOMMENDATIONS

A nationwide study is needed to draw a deeper insight into the CP profile in the UAE.

To enhance active surveillance and carbapenem stewardship programs, and to establish national guidelines for resistance classification to harmonize epidemiological surveillance data.

ACKNOWLEDGMENT

I wish to express my gratitude to the faculty members of Dubai Pharmacy College for Girls, the microbiology lab teams and medical directors at the healthcare facilities involved, for their support during the research project.

≡ Congratulations! ≡

To Maimouna Motaz Anis, Farah Mamooun Atout, Kenzy Hosam Hassan, Nujoom Ismael Shakir Alsawad, Daliya Said Abubakar, BPharm Students, supervised by: Dr. Semira Beshir and Dr. Rizah Anwar Assadi for presenting on their research poster titled:

"Understanding Knowledge Gaps and Perceived Barriers to Atherosclerotic Cardiovascular Disease (ASCVD) Prevention: Insights from the UAE Population"



Understanding Knowledge Gaps and Perceived Barriers to Atherosclerotic Cardiovascular Disease (ASCVD) Prevention: Insights from the UAE Population

Maimouna Anis, Farah Atout, Kenzy Hassan, Nujoom Alsawad, Daliya Abubakar, Semira Beshir and Rizah Anwar Assadi
Dubai Pharmacy College for Girls, Dubai, United Arab Emirates



INTRODUCTION

- ❑ Atherosclerotic cardiovascular disease (ASCVD) remains a leading cause of morbidity and mortality in the UAE and globally.
- ❑ ASCVD risk factors comprise of non-modifiable and modifiable risk factors.
- ❑ Public, healthcare professionals and policy makers can play pivotal roles in ASCVD prevention.
- ❑ There is limited research on ASCVD prevention in the UAE.

OBJECTIVES

- ❑ To determine level of UAE PUBLIC awareness regarding ASCVD risk factors and prevention
- ❑ To determine the barriers of ASCVD prevention
- ❑ To determine the demographic factors associated with ASCVD knowledge

METHODS

- ❑ **Study design:** cross sectional study
- ❑ **Study tool:** Self-administered virtual survey
- ❑ **Sampling:** convenient sampling technique
- ❑ **Study criteria:** Adults aged 18 years and older in the UAE
- ❑ **Ethical approval:** obtained from DPCG research and ethics committee
- ❑ **Pilot study:** included 30 individuals
- ❑ **Reliability:** Chronbach alpha for Knowledge section - 0.797 and for barrier section - 0.881
- ❑ **Data analysis:** descriptive statistics and Chi square test using SPSS

RESULTS AND DISCUSSION

Demographics:

- ❑ Total of 401 participants, 74.1% were female, 66.3% were young adults and 68.8% are middle eastern.
- ❑ Common comorbidities included overweight/obesity (41.1%), high cholesterol (11.2%), and hypertension (9.9%).

Barriers of ASCVD prevention by nearly 50-66% of participants:

- Personal factors:** stress and time constraints, postponing ASCVD preventive practices for later times.
- Socioeconomic factor:** increased cost of engaging in preventive practices and easy access to tobacco products.
- HealthCare related factor:** lack of community-based interventions and deficient patient-physician communication.

Knowledge Levels:

- ❑ **26** statement used to assess knowledge on symptoms, risk factors and preventive practice.
- ❑ Relatively high awareness of ASCVD symptoms and risk factors but there is limited knowledge of preventive practices and specific health parameters.
- ❑ The top three source of information regarding ASCVD are social media, healthcare providers and family and friends.

Demographic factors associated with better knowledge:



- ❑ Younger age (Young adults) showed significantly better knowledge compared to middle-aged adults (>40 years) (P = .033).
- ❑ Healthcare-related job holders demonstrated better knowledge (P < .001).
- ❑ Participants with monthly incomes above AED 40,000 had better knowledge (P = .003).

CONCLUSION

- ❑ There is a need to Improve the knowledge related to preventive practices and targets for ASCVD prevention among the public in the UAE. In addition, identified personal, healthcare system, and socio-economic barriers need to be addressed.
- ❑ Collaborative effort among the Public, healthcare provider and policy makers is needed to improve ASCVD prevention.

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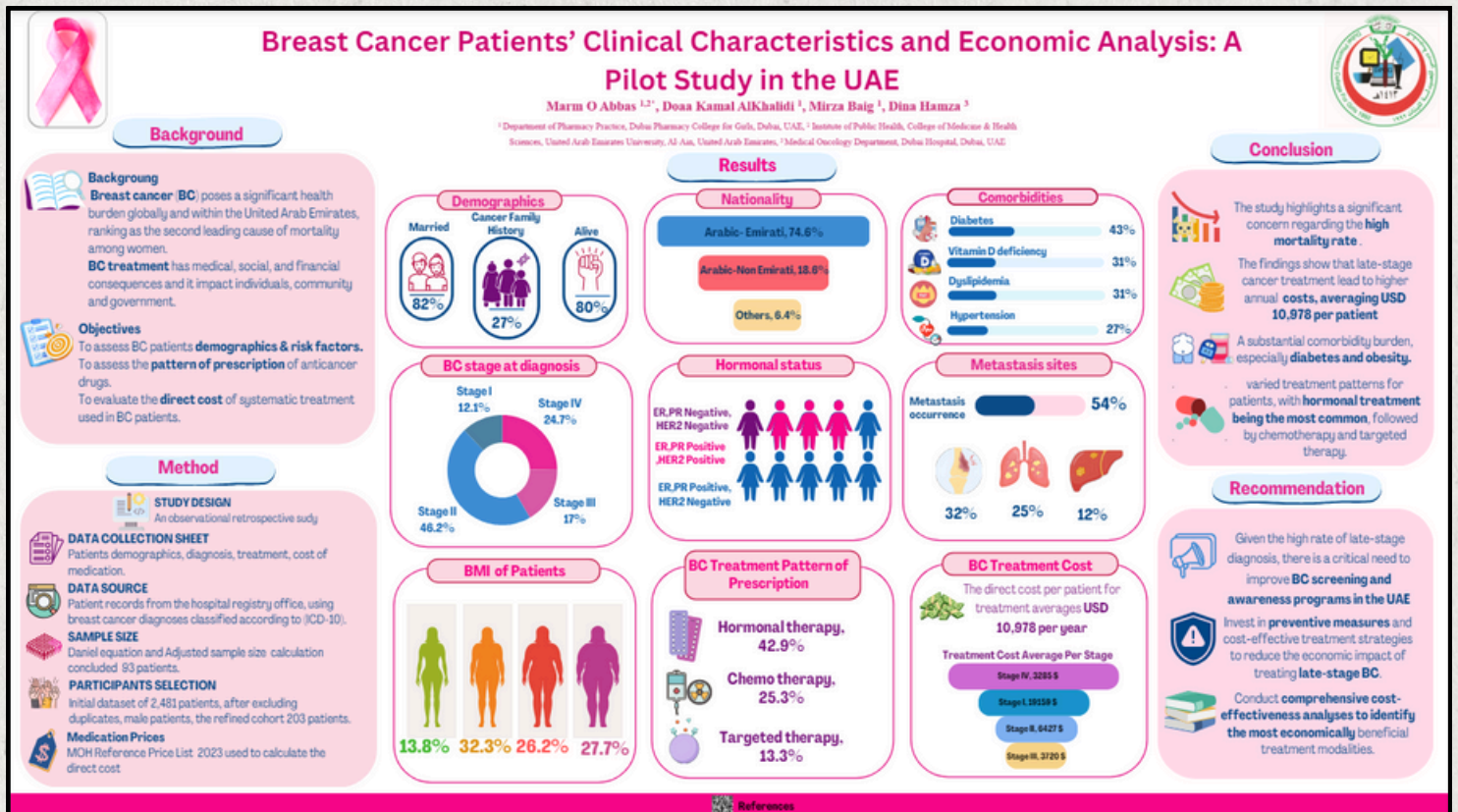
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≡ Congratulations! ≡

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